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ABSTRACT

Sex-role stereotypes have been defined as the constellation of psychological traits that characterize one sex more than another. This thesis investigates the role of eight independent variables--gender, classification of student, socioeconomic status of the parents, mother's employment outside the home, family structure, parental education level, size of school, and nationality of student--in sex-role stereotyping among students. Two instruments, a demographic sheet and the Occupational sex-role stereotyping sheet, were used. The sample of 170 secondary students (80 males, 90 females) was used to make 24 comparisons. Results supported the following generalizations: (1) Male secondary school students have greater occupational sex-role stereotyping than female students; (2) The independent variables mother's employment outside the home and socioeconomic status of the parents should be examined concurrently with occupational sex-role stereotyping; and (3) The independent variables size of school and classification of student should also be examined concurrently with occupational sex-role stereotyping. Findings support studies that show boys as being more aware of sex roles than girls, as well as reports that males record higher mean sex-role stereotyping scores than females. Contains 37 references. Five appendices contain two survey instruments, an instruction sheet, and two letters regarding permission. (RJM)

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ED 395 219

OCCUPATIONAL SEX-ROLE STEREOTYPING IN SECONDARY STUDENTS

being

A Thesis Presented to the Graduate Faculty

of the Fort Hays State University in

Partial Fulfillment of the Requirements for

the Degree of Master of Science

by

Toby J. Holmes

B.S., Emporia State University

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Abstract

The purpose of the researcher was to investigate occupational sex-role stereotyping in secondary students. The independent variables were: gender, classification of student, socioeconomic status of the parents, mother's employment outside the home, family structure, parental education level, size of school, and nationality of the student. The dependent variable was scores from Occupational Sex-Role Stereotyping. The sample consisted of 170 secondary students. This included 80 males and 90 females; of these 47 were 9th grade students, 43 were 10th grade students, 46 were 11th grade students, and 34 were 12th grade students. Six composite null hypotheses were tested at the .05 level of significance employing three-way analysis of variance (general linear model).

A total of 24 comparisons were made plus 18 recurring. Of the 24 comparisons, 7 were main effect and 17 interactions. Of the 7 main effects, 1 was statistically significant at the .05 level. The statistically significant main

effect was for the independent variable gender. The results indicated males had a statistically higher mean occupational sex-role stereotyping score than females. Of the 17 interactions, 2 were statistically significant at the .05 level. The following interactions were statistically significant:

1. the independent variables mother's employment outside the home and socioeconomic status of the parents; and,
2. classification of the student and size of school enrollment.

The results of the present study appeared to support the following generalizations:

(1) male secondary school students have greater occupational sex-role stereotyping than female,

(2) the independent variables mother's employment outside the home and socioeconomic status of the parents should be examined concurrently with occupational sex-role stereotyping, and

(3) the independent variables size of school and classification of student should be examined concurrently with occupational sex-role stereotyping.

Introduction

Overview

Williams and Best (1982) defined sex role stereotypes as "the constellations of psychological traits that are said to be more characteristic of one sex than another" (p. 15). Williams and Best stated, "A stereotype is usually considered to be cognitive, it is a set of beliefs, it deals with what men and women are like, and it is shared by members of a particular group" (p.15). Stereotypes often do not allow for individual differences and have limited or no information to support them. However, Williams, Radin, and Allegro (1992) hypothesized:

> It is possible that children raised in families where mothers and fathers reward and model non-stereotyped sex-roles, and where fathers do not give typically male responses to their daughters, develop different sex role attitudes than do children raised in

families where the traditional pattern exists, that is, where mothers serve as primary caregivers and fathers have a secondary role. (p. 458)

Children experience sex-role stereotyping from the time they are born or even earlier if the sex of the baby is known prior to its birth. Color choice, play environment, and variety of toys all differ according to the sex of the child.

Pomerleau, Bolduc, Malcuit, and Cossette (1990) researched environmental stereotypes in the first two years of life. It was found that play environments of girls and boys differ according to gender. Boys were noted as having a larger variety of toys. Boys had more sports equipment, vehicles, and military toys whereas girls had more feminine toys such as dolls, doll houses, and domestic objects. Colors of the living environment were also reported. Boys wore more blue, red, and white clothing, while girls wore more pink and multicolored clothing. Williams and Best (1982) reported that stereotyping can occur as early as age 3. Prior to age 7 or 8, children

focused on "overt" qualities, such as appearance and possessions, but older children focused on "covert" qualities such as dispositions, values, and beliefs. According to Hohensee and Derman-Sparks (1992):

> Children are aware of differences in color, language, gender, and physical ability at a very young age. Numerous research studies about the process of identity and attitude development conclude that children learn by observing the differences and similarities among people and by absorbing the spoken and unspoken messages about those differences. (p. 1)

Blankinship (1984) maintained the following:

> The strength that stereotypes have in affecting people's behavior lies in the fact that they are learned at a very early age. Research and theory suggests that very young children naturally see people in terms of stereotypes because it is cognitively a way of structuring the world so that it can be understood...

> Unfortunately, learned so early, most stereotypes are not questioned but simply accepted as truth. (pp. 3-4)

However, Williams et al. (1992) indicated, "Fathers, who themselves have grown up playing with blocks and building materials, may be more likely to choose these toys when playing with their female children" (p. 459). Williams et al. also stated, "Engaging in such typically male play activities may have a powerful effect on daughters for it has been suggested that it is the opposite sex parent that sets the limits on gender flexibility in the children" (p. 459).

Within the past two decades, attitudes towards and opportunities and expectations for American women have seen rapid changes. Society has seen more women enter the work force. It has seen women set and meet higher educational and professional goals and broaden their view of sex-appropriate occupations.

However, according to O'Reilly (1988, p. 4) "Women are still clustered in low paying, low status, traditional jobs such

as waitress, clerk, and secretary." Williams and Best (1982) reported that there are many occupations, in every country, that are highly sex typed.

> At the professional level in the United States, elementary school teachers and nurses are usually women and engineers and accountants are usually men; at a less skilled level, domestic workers are usually women and truck drivers are usually men; in the business area, most clerical workers are women and managers are men. (p. 293)

Sex-Role Stereotyping in School

Research over the last decade has shown that males and females have different classroom experiences because they approach learning differently and because teachers tend to treat them differently. Achievement expectations for females in some subjects are usually lower, as they are for members of certain racial and ethnic groups and for poor students (Schwartz and Hanson, 1992). O'Reilly (1988) maintained that

many teachers bring sex-role stereotyping to the first class they teach. They have experienced females who teach at the elementary level and males who are the principals and superintendents. O'Reilly (1988) also concluded, "Teacher's "perceptions of better" are divided: girls behave better but boys have better brains and bodies; therefore, are more "valuable to society" (p. 4).

Schwartz and Hanson (1992) stated:

> Traditionally, females have found advanced mathematics achievement elusive. Girls' mathematic achievement in the elementary grades is equal to boys' but decreases in the middle school. An analysis of math achievement of twelfth grade girls in 15 countries revealed that in all but three countries girls were less successful than boys. That gender differences seem not to surface until age ten suggests that the decline of female achievement is the result of a strong pattern of socialization to mathemetics success or failure rather

> than to gender differences in innate ability. As girls progress through school, they are less likely to continue their math education either taking more rudimentary courses or dropping the subject altogether. (p. 1)

Further support of this idea comes from the American Association of University Women (1992) which maintained that girls were being steered away from the math and science courses which were required for their productive participation in nontraditional careers. The American Association of University Women (1992) also wrote, "A study of Rhode Island seniors found that 64 percent of the male students who had taken physics and calculus were planning to major in science or engineering compared to 18.6 percent of the female students who had taken these courses" (p. 27). The American Association of University Women (1992) indicated that girls who do go into scientific fields after high school report that the encouragement provided by their teachers was very important to their success.

Researchers have documented the pervasive gender-based inequities in American schools and showed that girls self-esteem was directly related to how well they learned and succeeded in school (American Association of University Women, 1992). Although self esteem was frequently conceptualized as an independent variable affecting vocational behavior and adjustment, the effects of careers and career preparation on self-esteem were equally of interest (Stein, Newcomb, & Bentler, 1990).

Williams and Best (1982) maintained that teachers play an important role in the sex-role development of children beginning as early as preschool. Girls receive more positive feedback for non-academic behaviors, such as neatness and quietness. Boys receive more positive feedback for academic behaviors. Teachers may also encourage stereotypically appropriate behaviors such as competition in boys and provide more physical closeness for girls.

Blankinship (1984) reported several differences in the way teachers interact with boys and girls.

> Teachers were found to talk more to boys than to girls and to interact more with boys in general than with girls. They help boys solve problems but give girls the answers.... Teachers also expect boys to give them more trouble... and discipline boys more harshly... Intellectually, the bias is for males; socially and behaviorally, for females. (p. 8)

The primary goal of education is to assist the change process and those who are involved in education must consider that part of the role of a teacher is to serve as a change agent (McCure and Mathews, 1978, cited by Hansen and Biernat, 1992). McCure and Mathews (1978, cited by Hansen and Biernat, 1992) indicated that even though sources of sex stereotyping in the schools were the textbooks and instructional materials, the attitudes and actions of the teachers played a vital part in the students' development and

self-image. Barnhart (1983) stated, "Career education is usually the formal approach to learning about occupations. Much learning about careers takes place via the incidental teaching/learning method. All who are involved in educating children need to be aware of how children view occupational roles" (p. 167).

Why do researchers study sex roles? Forisha (1978) states:

> By studying the impact on our lives of masculine and feminine forms, we can learn more about ourselves. We can learn about how we have come to be where we are and consequently what the future holds in store for us. But our knowledge can extend even further. With our knowledge we can exercise some control over our lives; hence we can direct our future. Thus it is not only knowing what our future holds in store for us that is important, but how we can get the most out of it. (p. 5)

Long (1994) conducted a study of 324 students in southwestern Kansas to determine sex-role stereotyping in secondary school students. Eight independent variables were used in the study. They were: gender, socioeconomic status of the parents, mother's employment outside the home, parent's formal education, family structure, classification of student, size of school district, and nationality of the student. The dependent variable used was scores from the Occupational Sex-Role Stereotyping instrument. Six null hypotheses were tested using three way analysis of variance (general linear model). A total of 25 comparisons plus 17 recurring were made. Of the 25 comparisons, 8 were for main effect and 17 for interactions. Of the 8 main effects, 2 were statistically significant at the .05 level. The main effects of gender and nationality of the student were found to be statistically significant. None of the 17 interactions were found to be statistically significant.

Gender and Sex-Occupational Stereotypes

Forisha (1978) stated the following:

> Man may see himself in any of the following roles: as a Superman of limitless capacity; as a Neanderthal man in whom physical force rules over reason; as a sexual athlete ready and willing to perform sexually at any moment with any attractive woman; as the hero fighting insurmountable odds in the name of valor and finally triumphing in a fair fight; as the achiever seeking status and possessions; as the dominator whose goal is power; or finally as a playboy, the constant youth. (p.158)

Forisha (1978) also indicated:

> Women are seen alternately as the nurturing mother or as the witch mother. The nurturing mother is kind and giving. The witch mother is fearsome and angry. Women may also choose between being the loving and submissive wife or the dominating wife and bitch. Again submission is built into the favored role; strength is

> seen only in its perversion, in the bitch. Finally women are seen as the temptress-goddess or the sex object. The temptress-goddess is viewed with awe and fear, representing the sexual mysteries of women. The sex object is a passive toy that lends itself to the will of men. (p. 161)

In the United States, sex stereotypes create a barrier whenever persons of one sex seek entry into an occupation that has traditionally been occupied primarily by members of the other sex (Forisha, 1978). The same dynamics may operate when women seek to enter fields such as law or management and when men seek to enter such fields as elementary education and nursing (Forisha, 1978).

The male socialization process in which the goal is to be better than all men preferably, and all women certainly, begins at a very early age. Boys learn to admire and aspire to be like their role models. They also learn to be pragmatic, never seek help, know all the answers, be tough, be independent, powerful,

ambitious, and physically and sexually aggressive (Duberman, 1975).

Duberman (1975) also wrote:

> If Moses or John Wayne were to hand down the "Ten Commandments of Masculinity," they might look like this:
>
> The Ten Commandments of Masculinity
>
> 1. Thou shalt not cry or in other way display fear, weakness, sympathy, empathy, or involvement before thy neighbor.
> 2. Thou shalt not be vulnerable but shalt honor and respect the "logical", "practical", or "intellectual", as thou definest them.
> 3. Thou shalt not listen for the sake of listening - it is a waste of time.
> 4. Thou shalt not commit introspection.
> 5. Thou shalt be condescending to women in every way.
> 6. Thou shalt control thy wife's body and all its relations.

7. Thou shalt have no breadwinners before thee.
8. Thou shalt not be responsible for housework or child care.
9. Thou shalt honor and obey the straight and narrow path to success: job specialization.
10. Thou shalt have the answer to all problems at all times. (p. 224)

Bardwell, Cochran, and Walker (1986) concluded, "boys are more aware of sex roles than girls because of the rigid, culturally determined necessity for boys to avoid feminine activities" (p. 276).

The human potential and sex equity movements have lead researchers to create the philosophy that supports the right of both sexes to pursue occupations on the basis of individual abilities, interests, values, and goals rather than on the basis of culturally established and socially maintained sex roles and stereotypes (Hayes, 1986). Hayes postulated that to truly lessen sexual segregation in the labor force, men will also

need to cross over into occupations nontraditional for their sex. A man who enters a female concentrated occupation is viewed as irrational for seeking a less valued, lower status, and lower paying "feminine" position.

Forisha (1978) indicated the following:

> Masculinity and femininity are structures that have for centuries guided the lives of men and women and shaped the decisions which they made. Yet, these structures have been shaped by people, and can be changed by people. We are in the process of such a change today, a time when more individuals are taking the risk of being more fully human, exploring more of their potentials, and choosing a more androgynous life-course. Such individual changes will have an impact on the form by which we live, and though the forms change more slowly, they too are beginning to change. We may someday have a society in which human potential is indeed *human* potential without respect to male or

female gender. (pp.72-73)

Grade Level, Age, and Sex-Role Occupational Stereotyping

Awender and Wearne (1990) examined occupational perspectives and preferences of students ages 9-14. They reported that as the age of children increased the sex-occupational stereotypes decreased. Awender and Wearne's study was supported by another study conducted by Nelson and Keith (1990) who stated, "chronological age was inversely and significantly related to the level of traditionalism of both male and female attitudes; as the adolescents aged, they became less traditional" (p. 186).

A longitudinal study by George and Schaer (1988) addressed occupational preference of elementary female students over a 5 year period. The results of their study revealed that career choices of girls between the ages of 8 and 13 were affected by IQ, family background, and parental views on sex stereotyping. Those females who chose mathematics and science careers had higher IQs and grade point averages

than females who chose nursing and teaching careers. Parents of females choosing non-traditional jobs had more formal education. Females who chose non-traditional careers referred to themselves as "tomboys" during their childhood. George and Schaer (1988) also noted that as the age of the girls increased, the assortment of career choices made by females also increased.

Socioeconomic Status and Sex-Occupational Stereotyping

Fadale (1974) found that children from the upper socioeconomic status reported more career awareness than those from lower socioeconomic status. Children from the upper socioeconomic status revealed a broader knowledge of identification of workers, occupational prestige, and job advantages.

Fadale's 1974 results were supported by those from a study completed by McCandless, Lueptow, and McClendon in 1989. According to McCandless et al. (1989):

> Members of the lower social class are constrained

> by lower levels of education and employment in occupations void of self direction. The family style has been characterized by a rigid parent/child relationship, a kinship network that exerts informal pressure to conform to existing norms, and a marriage pattern where husband and wife have a clear differentiation of tasks and a considerable number of separate interests and activities. (p. 628)

Hispanic women also follow along the same guidelines. Lara-Cantu (1989) wrote, "Hispanic women from a high socioeconomic background endorse traditional feminine stereotypes less than other women" (p. 396).

Awender and Wearne (1990) conducted a study to determine if there was a relationship between socioeconomic status and occupation choice of children. "Sex stereotype answers were given by the lowest socioeconomic group most often, followed by the highest socioeconomic group. The middle socioeconomic group of respondents demonstrated

virtually no pattern of selecting traditional male and/or female occupations" (p. 8).

Duberman (1975) wrote:

> Definition of future gender roles are instilled early in the working class. Girls may entertain romantic dreams of being glorified by Hollywood or marrying a Prince Charming who comes riding on a gigantic charge account, but realistically they expect to work at mundane jobs after marriage because their earnings will be needed to help out. They also know that their jobs must be tailored not only to their own qualifications but also to the demands of home chores. Although their aspirations, like those of middle-class girls, include the wish to be doctors, teachers, and other professionals, only one-fourth really expect to obtain the jobs they would like to have, and most of the others see marriage as the chief obstacle. A second and no less potent obstacle to one's goals is lack of education, mentioned

more than twice as often by blue-collar girls than by daughters of professionals and managers. (p. 148)

Maternal Employment and Sex-Role Occupational Stereotyping

Nelson and Keith (1990) wrote: "Maternal employment and the father's attitude toward it were significantly and inversely related to the level of traditionalism of female sex role attitudes; girls whose mothers worked and whose fathers approved were more non-traditional" (p.185).

Keith (1990) indicated:

> The roles of women who work outside the home appear different to children than to those of full time homemakers. Some research has shown that both male and female children of employed women tend to have more liberal attitudes towards women's roles and approve of maternal employment to a greater extent than do children whose mother's do not work outside the home (p. 960).

According to Keith, there is some evidence that motivation to

model the working mother is stronger than the motivation to model the non-working mother.

Mannheim and Tally (1993) reported that with the increase in the number of mothers who are entering into the work force and the growing diversification of the types of jobs they are holding, they are more likely to transmit a more broad spectrum of work values to their children than is usually associated with feminine occupations. Mannheim and Tally stated, "It has been demonstrated that women in nontraditional, "innovative" occupations affect the occupational aspirations and choices of their daughters, as well as their attitudes to the feminine role differently than mothers in traditionally feminine occupations such as teaching or nursing" (p. 294).

Gold and Andres (1978, cited by Gardner and LaBrecque, 1986) hypothesized that both sons and daughters of employed mothers would have broader, less differentiated conceptions of sex roles. Conclusion from research by Gardner and

LaBrecque (1986) supported results from Gold and Andres. Gardner and LaBrecque stated:

> Daughters of employed mothers have a more liberal view of sex roles in the home and in society than daughters of homemaker mothers. However, daughters of homemaker mothers have more liberal views of sex roles in society and in the home than sons who have either homemaker or employed mothers. (p. 883)

According to Stewart (1976), there are at least three possible ways maternal employment might affect children's stereotypes.

> Working may raise the self-concept of the mother, thus making her a more confident role model for her daughter. A working mother may not be at home for long enough periods to "over protect" a daughter, thus encouraging higher achievement. Finally, maternal employment does lead to a different division of labor within the home and to more shared decision making, so

that neither parent is modeling a highly stereotyped role. (pp. 155-156)

Family Structure and Sex-Role Occupational Stereotyping

According to Kiecolt and Acock (1988), family structure influences can be very important for the different role models they make available. Sex typing is effected by family structure. Children from mother-headed families tend to hold less traditional gender-role attitudes because mothers do not insist as strongly on conformity to gender roles. Kiecolt and Acock (1988) stated, "Children in single-parent families perform a greater variety of household tasks to compensate for the absent parent, hence learning broader, less traditional definitions of gender roles" (p. 710). If gender role attitudes of children raised in families where the father is not present tend to be less traditional than those families who remain intact, it may be due to maternal employment (Kiecolt and Acock, 1988).

Structural characteristics such as socioeconomic status

of parents, demographic and family composition predicted more of the variation of the sex role orientation of men than of women (Tomeh, 1979). For women, the process through which attitudes emerged may be related to exposure to nontraditional standards and values rather than to the effect of their structural characteristics while men were influenced by structural characteristics (Tomeh, 1979).

Formal Education of Parents and Sex-Role Occupational Stereotyping

Brogan and Kutner (1976) found that female undergraduates whose mothers had been employed during one or more of the subjects' school years were more nontraditional in sex role orientation than those whose mothers had not worked or who had worked for less than one year. The difference, though, was not statistically significant; however, a significant relationship between mother's educational level and a more untraditional sex role orientation was reported.

The higher the educational level of the mothers, the more nontraditional were the mothers' attitudes. These attitudes may have been transmitted to their daughters.

Kiecolt and Acock (1988) reported that the more highly educated mothers who held less traditional gender-role attitudes and who were more likely to hold higher status jobs if employed, transmitted these attitudes to their children. However, Kiecolt and Acock went on to indicate that having a more highly educated mother did not influence men's attitudes towards gender roles.

Maternal attitudes are often predictors of daughter's attitudes. College-educated mothers would be more in agreement with the attitudes of college-educated daughters. It was noted by Brogan and Kutner (1976) that women's educational attainment had a greater effect on "sex-role modernity" and favorable attitudes toward equality of opportunity for women than do any of the other demographic variables they investigated.

Size of School and Sex-Role Occupational Stereotyping

Dunne (1980) wrote, "Rural birth and up-bringing appear to impose general restrictions on young people's prospects for educational and occupational attainment" (p. 397). Flora and Johnson (1978, cited by Dunne, 1980) noted, "The majority of rural women still conform to the traditional norms concerning woman's proper place: in the home, with the children, and supportive of her spouse's endeavors" (p. 399).

Dunne, Elliot, and Carlsen (1981), suggested that one reason for the discrepancy between educational attainment and occupational achievement was self-limitation in job choices. More recently, however, researchers suggested that this selection of highly sex-stereotyped jobs tended to be less characteristic of young women than of young men, and that more young women than young men saw jobs which were stereotyped for the opposite sex as realistic choices for themselves.

Nationality and Sex-Role Occupational Stereotyping

Morrison and Von Glinow (1990) maintained that white women and people of color encounter a "glass ceiling" in management. Morrison and Von Glinow described the "glass ceiling" in management as a barrier so subtle that it was transparent, yet so strong that it prevented women and minorities from moving up in the management hierarchy. Discrimination occurred in part because white men maintain that women and people of color are less suited for management than white men (Morrison and Von Glinow, 1990). Bias was most effectively decreased not only by education, but also by exposure to and experience with members of the opposite sex and other races (Powell, 1988, cited by Morrison and Von Glinow, 1990). Working alongside a woman or a minority group member may be the key to diminishing the discriminatory practices of white men.

The culture a person is raised in is another factor determining the type of occupation available to the individual.

Lara-Cantu (1989) stated:

> The Hispanic culture has been considered to be deeply affected by traditional sex roles and stereotypes that refer to the "machismo" and "self-sacrificing woman" syndromes. The first is characterized by extreme aggressiveness and intransigence in male-to-female relationships; the second, by women's dependent, submissive, and passive attitudes. (p. 389)

Bardwell et al. (1986) indicated, "The general trend of research findings has appeared to indicate that Hispanics are more sex stereotyped than Anglos" (p.276).

Summary

From the time they are born, males and females are treated differently. They learn expectations for their gender from the time they are wrapped in the respective pink or blue blankets in the hospital nursery and already begin to receive differential treatment from adults. They learn from the carton

the toys come in if they are intended for a boy or a girl. They are treated differently in the schoolroom; the girls being rewarded for good behavior, the boys being allowed a wider spectrum of behaviors because "boys will be boys" (Forisha, 1978). There are a number of assumptions that can affect occupational choice. Those considered in this review were based on biological sex differences, social class or socioeconomic status, employment of the mother, education of the parents, family structure, classification of the student, and nationality of the student.

Statement of the Problem

The purpose of the researcher was to investigate occupational sex-role stereotyping in secondary school students.

Rationale and Importance of the Research

It is important that counselors and teachers become more aware of sex-role stereotyping when assisting students with career choices. Counselors and educators need to become

change agents to help to break down these stereotypes. The women's movement, more women entering the labor force, and more women attending and graduating from college have opened doors that were previously closed for women entering the work place. It is expected that with increased education, more understanding and acceptance, any job should be available to either sex if the person has the desire and needed skills to successfully perform the required duties. The results of the present study could be used by secondary school teachers, counselors, administrators, counselor educators, and curriculum instructors to aid in developing career awareness units. After developing an awareness, the results could be used to build or enrich a curriculum including non-traditional career awareness. The study will contribute to further knowledge due to the fact that it employs more independent variables and in different combinations than was found in the related literature. The results of the present study provided information pertaining to the following questions:.

1. Is there an association between gender and occupational sex-role stereotyping of secondary school students?

2. Is there an association between the classification of the student and occupational sex-role stereotyping of secondary school students?

3. Is there an association between the socioeconomic status of parents and the occupational sex-role stereotyping of secondary school students?

4. Is there an association between the mother's employment outside the home and the occupational sex-role stereotyping of secondary school students?

5. Is there an association between the family structure in which the student lives and occupational sex-role stereotyping of secondary school students?

6. Is there an association between the level of parental education and occupational sex-role stereotyping of secondary school students?

7. Is there an association between the size of school and the occupational sex-role stereotyping of secondary school students?

8. Is there an association between nationality and the occupational sex-role stereotyping of secondary school students?

Composite Null Hypotheses

All hypotheses were tested at the .05 level of significance.

1. The differences among the mean Occupational Sex-Role Stereotyping scores of secondary school students according to gender, mother's employment outside the home, and level of parental education will not be statistically significant.

2. The differences among the mean Occupational Sex-Role Stereotyping scores of secondary school students according to gender, mother's employment outside the home,

and socioeconomic status of the parents will not be statistically significant.

3. The differences among the mean Occupational Sex-Role Stereotyping scores of secondary school students according to gender, level of parental education, and socioeconomic status of the parents will not be statistically significant.

4. The differences among the mean Occupational Sex-Role Stereotyping scores of secondary school students according to mother's employment outside the home, level of parental education, and socioeconomic status of the parents will not be statistically significant.

5. The differences among the mean Occupational Sex-Role Stereotyping scores of secondary school students according to family structure, classification of student, and size of school will not be statistically significant.

6. The differences among the mean Occupational Sex-Role Stereotyping scores of secondary school students

according to gender, nationality of the student, and socioeconomic status of the parent will not be statistically significant.

Definitions of Variables

Independent Variables and Rationale

The independent variables investigated were: gender, classification of the student, socioeconomic status of the parents, mother's employment outside the home, family structure, parental education level, size of the school, and nationality of the student. These independent variables were investigated for the following reasons:

1. there was a lack of information found in the related literature pertaining to these variables,
2. results found in the related literature were inconclusive, and
3. there was a lack of current information relating to these independent variables.

Independent Variables

Information pertaining to the independent variables was derived from the Demographic Sheet. The following eight independent variables were investigated:

gender - two levels;

level one - females, and

level two - males;

classification of student - four levels;

level one - 9th grade

level two - 10th grade

level three - 11th grade, and

level four - 12th grade;

socioeconomic status of the parents - two levels determined post hoc;

level one - pays full lunch rates, and

level two - do not pay full lunch rates;

mother's employment outside the home - two levels;

level one - yes, and

level two - no;

family structure - four levels determined post hoc;

level one - intact (biological mother and father)

level two - reconstituted (one biological parent and one step parent),

level three - one parent (mother or father only), and

level four - other;

parental educational level - four levels;

level one - less than high school graduate,

level two - high school graduate,

level three - high school graduate and some college or training, and

level four - college degree or beyond;

size of school - three levels;

level one - enrollment of 74 or less in the upper three grades during the 1993-94 school year,

level two - enrollment of 75-115 in the upper three grades during the 1993-94 school year,

level three - enrollment of 116-181 in the upper three grades during the 1993-94 school year;

nationality of the student - two levels determined post hoc;

level one - white, and

level two - nonwhite.

Dependent Variable

The dependent variable was scores from the Occupational Sex-Role Stereotyping instrument. (scores 0-35)

Limitations

The results of the study may have been affected by the following:

(1) sample was not random (subjects nor school);

(2) subjects of the study were from the same general geographic location; and

(3) the data were self-reported.

Methodology

Setting

The study was conducted at three secondary schools in southwest Kansas. The schools were selected to represent three enrollment sizes as defined by the Kansas State High School Activities Association (1993). Students from school 1, (enrollment of 74 or less, in the upper three grades, during the 1993-94 school year, community population approximately 400), school 2 (enrollment of 75-115, community population approximately 800), and school 3 (enrollment of 116-181, community population approximately 1400) were employed as subjects. The major sources of income for these three communities are agriculture and petroleum products.

Subjects

The researcher was given permission to survey all students who chose to participate in schools 1 and 2. The counselor at school 3 presented the survey to members of two study halls which contained members of each grade level.

Those students who had copies of the questionnaires complete enough to use were included in the sample. Two questionnaire were not used by the researcher due to insufficient completion of the instrument. The convenience sample consisted of 41 students from school one, 71 students from school two, and 58 students from school three, for a total of 170 students. Included were 80 males and 90 females; of these, 47 were 9th grade students, 43 were 10th grade students, 46 were 11th grade students, and 34 were 12th grade students.

Instrumentation

Two instruments were employed in the present study. The instruments were the Demographic Sheet and the Occupational Sex-Role Stereotyping sheet.

Demographic Sheet

The Demographic sheet was developed by Long in 1994. It had questions that dealt with the following areas: gender, socioeconomic status of the parents, mother's employment outside the home, parental education, family structure,

student classification, and nationality of the student. Copies of the Demographic Sheet were color coded according to school size; yellow was used to represent school 1, white to represent school 2, and blue to represent school 3. (Appendix A).

The Occupational Sex-Role Stereotyping

The Occupational Sex-Role Stereotyping survey consists of 35 items. Items for the inventory were adapted by Eichman from three studies; Bailey and Nihlen, Scheresky, and Kennedy, (Eichman, 1987). The instrument was then used by Billings (Jansonius) in 1993 in northwest Kansas. The instrument used by the researcher was edited by Long in 1994. The original instrument consisted of 30 occupations. Long added an additional 5 occupations to the instrument. Respondents had three options from which to choose;"female only", "male only", or "both". The subjects were asked to indicate if they thought each of the particular occupations were best suited for females, males, or both (Appendix B). The instrument was

scored by giving 1 point for each answer of "female only" and "male only". The higher the resulting score, the greater the sex-role stereotyping. The possible scores were 0-35.

Design

A status survey factorial design was employed. The independent variables investigated were gender, classification of the student, socioeconomic status of the parents, mother's employment outside the home, family structure, level of parental education, size of school, and nationality of the student. The dependent variable was scores from the Occupational Sex-Role Stereotyping. Sample size was 170. Six Composite null hypotheses were tested employing three-way analysis of variance (general linear model). The following design was used with each composite null hypothesis:

composite null hypothesis number 1, a 2x2x4 factorial design;

composite null hypothesis number 2, a 2x2x2 factorial design;

composite null hypothesis number 3, a 2x4x2 factorial design;

composite null hypothesis number 4, a 2x4x2 factorial design;

composite null hypothesis number 5, a 4x4x3 factorial design; and

composite null hypothesis number 6, a 2x2x2 factorial design.

McMillan and Schumacher (1989) cited 10 threats to internal validity. These 10 threats were dealt with in the following ways:

(1) history - did not pertain because the present study was status survey;

(2) selection - all students who were present, who consented to participate and completed the instruments were included;

(3) statistical regression - did not pertain because the present study was status survey;

(4) testing - instruments were administered according to standard procedures;

(5) instrumentation - did not pertain because the present study was status survey;

(6) mortality - did not pertain because the present study was status survey;

(7) maturation - did nor pertain because the present study was status survey;

(8) diffusion of treatment - did not pertain because the present study was status survey;

(9) experimental bias - no treatment administered and data were collected by standard procedures; and

(10) statistical conclusion - two mathematical assumptions were violated (random sampling and equal numbers of subjects in cells). The general linear model was employed to correct for lack of equal numbers in cells, and the researcher did not project beyond the procedures employed.

McMillan and Schumacher (1989) cited 2 threats to external validity. These 2 threats were dealt with in the following ways:

(1) population external validity - the sample was not random; therefore, generalizations should be made only to similar groups; and

(2) ecological external validity - no treatment was administered and data were collected by standard procedures.

Data Collecting Procedures

Data were collected for grades 9, 10, 11, and 12 from three schools of differing enrollment. Students from school 1 (enrollment of 74 and less in the upper three grades, 1993-94 school year), school 2 (enrollment of 75 to 115), and school 3 (enrollment of 116 to 181) were used as subjects. The researcher was given permission to survey all students who selected to participate in school 1 and school 2. The counselor of school 3 administered the survey to two study hall classes which consisted of members of each grade level.

The researcher administered the survey in school 2. The researcher chose to use 9th grade English, 10th grade Health, 11th grade American History, and 12th grade American Government as the classes to survey. The researcher read the instruction sheet (Appendix C) to each class and presented the survey upside down on each participant's desk. The students were instructed that they could ask questions if needed. The researcher administered the survey to each class at each grade level. Those who chose not to participate were allowed to sit quietly in their seat and turn in a blank instrument. No student chose not to participate.

The researcher mailed sufficient copies to school 1 and school 3. The counselor of school 1 administered the instrument to the English classes of the various levels. The counselor at school 3 administered the instrument to two study hall classes that had students of all levels enrolled. Following the administration of the instruments, the counselors placed the completed copies of the questionnaire in

a sealed envelope and mailed them back to the researcher.

After administration of the instruments were complete, the researcher checked the copies for completeness. All but two instruments were complete enough to use in the study. The two that were unusable were removed from the sample. Information was taken from those copies of the survey that were complete enough to utilize. The results were then compiled and used in a data sheet. The data were then analyzed by mainframe computer at Fort Hays State University, Hays, Kansas.

Research Procedures

The researcher utilized the following steps:

(1) research topic was chosen;

(2) thesis advisor was contacted and permission given to conduct exploratory study;

(3) arrangements were made for obtaining data;

(4) arrangements were made with the schools and grade levels to participate;

(5) computer searches were made using ERIC, Educational Index, Psychological Abstracts, Psych/Lit., and Sociofile;

(6) research proposal was compiled;

(7) research proposal defended before thesis committee;

(8) data were collected;

(9) data were analyzed;

(10) complete thesis written;

(11) complete thesis defended before thesis committee; and

(12) final thesis was edited.

Data Analysis

The following were compiled:

(1) appropriate descriptive statistics,

(2) three-way analysis of variance (general linear model),

(3) Bonferroni (Dunn) *t* test for means, and

(4) Duncan's multiple range test for means.

Results

The purpose of the researcher was to investigate occupational sex-role stereotyping in secondary students. The independent variables were: gender, classification of student, socioeconomic status of the parents, mother's employment outside the home, family structure, parental educational level, size of school, and nationality of the student. The dependent variable was scores from the Occupational Sex-Role Stereotyping instrument (0-35). The sample consisted of 170 secondary students. This included 80 males and 90 females; of these 47 were 9th grade students, 43 were 10th grade students, 46 were 11th grade students, and 34 were 12th grade students. Six composite null hypotheses were tested at the .05 level of significance employing three-way analysis of variance (general linear model). The following design was used with each composite null hypothesis:

composite null hypothesis number 1, a 2x2x4 factorial design;

composite null hypothesis number 2, a 2x2x2 factorial design;

composite null hypothesis number 3, a 2x4x2 factorial design;

composite null hypothesis number 4, a 2x4x2 factorial design;

composite null hypothesis number 5, a 4x4x3 factorial design; and

composite null hypothesis number 6, a 2x2x2 factorial design.

The results section was organized according to composite null hypotheses for ease of reference. Information pertaining to each null hypothesis was presented in a common format for ease of comparison.

It was hypothesized in composite null hypothesis number one that the differences among the mean Occupational Sex-Role Stereotyping scores of secondary school students according to gender, mother's employment outside the home

and level of parental education will not be statistically significant. Information pertaining to composite null hypothesis number one was presented in Table 1. The following were cited in Table 1: variables, group sizes, means, standard deviations, F values, and p levels.

Table 1: A Comparison of Mean Occupational Sex-Role Stereotyping Scores of Secondary School Students According to Gender, Mother's Employment Outside the Home, and Level of Parental Education Employing a Three-Way Analysis of Variance

Variable	n	M*	s	F value	p level
Gender (A)					
female	90	4.8[a]	7.10	5.69	.0183
male	80	7.5[b]	8.65		
Mother's Employment (B) Outside the Home					
yes	108	5.4	9.39	1.00	.3182
no	62	7.1	6.99		
Level of Parental (C) Education					
1**	37	6.9	9.28		
2	44	6.4	7.79	0.17	.9171
3	58	5.8	8.01		
4	31	4.8	6.46		
	Interactions				
	A x B			0.03	.8536
	A x C			0.37	.7756
	B x C			0.37	.7783
	A x B x C			0.42	.7362

*The larger the value, the greater the stereotyping (possible score 0-35).

**1 = less than high school graduate, 2 = high school graduate, 3 = high school graduate and some college training, 4 = college degree or beyond

[ab]Difference statistically significant at the .05 level according to Bonferroni (Dunn) t test for means.

One of the 7 p values was statistically significant at the .05 level; therefore, the null hypothesis for this comparison was rejected. The statistically significant comparison was for the main effect gender. The results cited in Table 1 indicated that males had a statistically higher occupational sex-role stereotyping mean than females.

It was hypothesized in composite null hypothesis number two that the differences among the mean Occupational Sex-Role Stereotyping scores of secondary school students according to gender, mother's employment outside the home, and socioeconomic status of the parents would not be statistically significant. Information pertaining to composite null hypothesis number two was presented in Table 2. The following were cited in Table 2: variables, group sizes, means, standard deviations, F values, and p levels.

Table 2: A Comparison of Mean Occupational Sex-Role Stereotyping Scores of Secondary School Students According to Gender, Mother's Employment Outside the Home, and Socioeconomic Status of the Parents Employing a Three-Way Analysis of Variance.

Variable	n	M*	s	F value	p level
Gender (A)					
female	90	4.8[a]	7.10	7.58	.0066
male	80	7.5[b]	8.65		
Mother's Employment Outside the Home (B)					
yes	108	5.4	9.39	0.59	.4440
no	62	7.1	6.99		
Socioeconomic Status of the Parents (D)					
1**	109	5.6	7.91	0.00	.9490
2	61	6.9	8.06		
	Interactions				
	A x B			0.23	.6347
	A x D			2.33	.1292
	B x D			4.56	.0342
	A x B x D			0.94	.3343

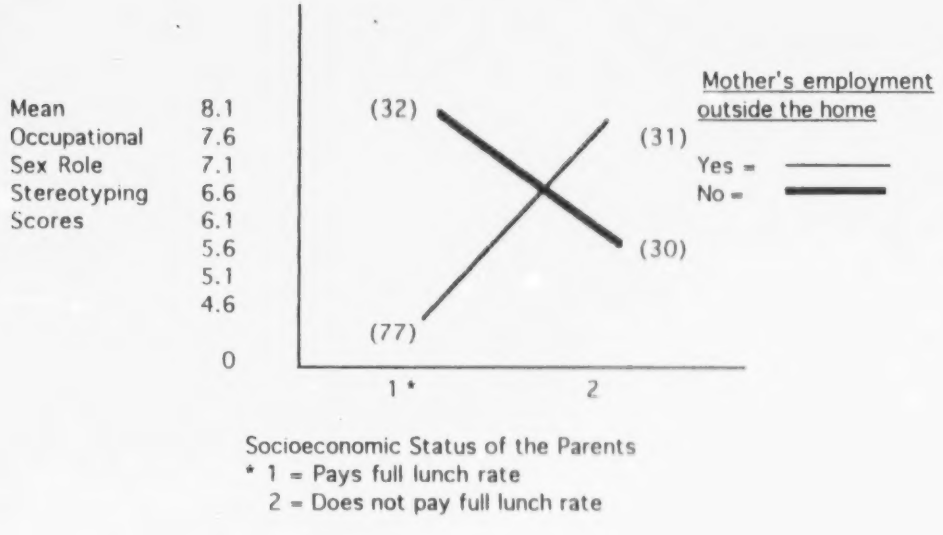
*The larger the value, the greater the stereotyping (possible score 0-35).

**1 = Paid full lunch rates, 2 = Did not pay full lunch rates.

[ab]Difference statistically significant at the .05 level according to Bonferroni (Dunn) t test for means.

Two of the 7 p values were statistically significant at the .05 level; therefore, the null hypotheses for these comparisons were rejected. One of the statistically significant comparisons was for the main effect gender (recurring Table 1). The second statistically significant comparison was for the interaction between the independent variables mother's employment outside the home and socioeconomic status of the parents. This interaction was depicted in a profile plot. Figure 1 contains mean occupational sex role stereotyping scores and curves for mother's employment outside the home.

Figure 1: The Interaction Between the Independent Variables Mother's Employment Outside the Home and Socioeconomic Status of the Parents for the Dependent Variable Occupational Sex-Role Stereotyping.



The interaction between the independent variable mother's employment outside the home and socioeconomic status of the parents was disordinal.

The information cited in Figure 1 indicated the following:

1. students who paid full price for their lunch and whose mothers did not work outside the home had numerically the highest mean occupational sex-role stereotyping score of any sub-group, and
2. students who paid full price for their lunch and whose mothers worked outside the home had numerically the lowest mean occupational sex-role stereotyping scores of any sub-group.

It was hypothesized in composite null hypothesis number three that the differences among the mean Occupational Sex-Role Stereotyping scores of secondary school students according to gender, level of parental education and socioeconomic status of the parents would not be statistically significant. Information pertaining to composite null hypothesis number three was presented in Table 3. The following were cited in Table 3: variables, group sizes, means, standard deviations, F values, and p levels.

Table 3: A Comparison of Mean Occupational Sex-Role Stereotyping Scores of Secondary School Students According to Gender, Level of Parental Education, and Socioeconomic Status of the Parents Employing a Three-Way Analysis of Variance.

Variable	n	M*	s	F value	p level
Gender (A)					
female	90	4.8[a]	7.10	6.11	.0146
male	80	7.5[b]	8.65		
Level of Parental (C) Education					
1**	37	6.9	9.28		
2	44	6.4	7.79	0.51	.6731
3	58	5.8	8.01		
4	31	4.8	6.46		
Socioeconomic Status of the Parents (D)					
1***	109	5.6	7.91	0.07	.7893
2	61	6.9	8.06		
	Interactions				
	A x C			0.11	.9568
	A x D			2.53	.1135
	C x D			0.93	.4257
	A x C x D			0.01	.9985

*The larger the value, the greater the stereotyping (possible score 0-35). **1 = less than high school graduate, 2 = high school graduate, 3 = high school graduate and some college training, 4 = college degree or beyond. ***1 = Paid full lunch rates, 2 = Did not pay full lunch rates.

[ab]Difference statistically significant at the .05 level according to Bonferroni (Dunn) t test for means.

One of the 7 p values was statistically significant at the .05 level; therefore, the null hypothesis for this comparison was rejected. The statistically significant comparison was for the main effect gender (recurring Table 1). The information cited in Table 3 indicated no additional associations between independent variables and the dependent variable.

It was hypothesized in composite null hypothesis number four that the differences among the mean Occupational Sex-Role Stereotyping scores of secondary school students according to mother's employment outside the home, level of parental education, and socioeconomic status of the parents would not be statistically significant. Information pertaining to composite null hypothesis number four was presented in Table 4. The following were cited in Table 4: variables, group sizes, means, standard deviations, F values, and p levels.

Table 4: A Comparison of Mean Occupational Sex-Role Stereotyping Scores of Secondary School Students According to Mother's Employment Outside the Home, Level of Parental Education, and Socioeconomic Status of the Parents Employing a Three-Way Analysis of Variance.

Variable	n	M*	s	F value	p level
Mother's Employment (B) Outside the Home					
yes	108	5.4	7.10	1.02	.3135
no	62	7.1	6.99		
Level of Parental (C) Education					
1**	37	6.9	9.28		
2	44	6.4	7.79	0.59	.6251
3	58	5.8	8.01		
4	31	4.8	6.46		
Socioeconomic Status of (D) the Parents					
1***	109	5.6	7.91	0.13	.7184
2	61	6.9	8.06		
	Interactions				
	B x C			0.43	.7339
	B x D			1.39	.2405
	C x D			0.38	.7696
	B x C x D			2.09	.1038

*The larger the value, the greater the stereotyping (possible score 0-35). **1 = less than high school graduate, 2 = high school graduate, 3 = high school graduate and some college training, 4 = college degree or beyond. ***1 = Paid full lunch rates, 2 = Did not pay full lunch rates.

None of the 7 *p* values were statistically significant at the .05 level; therefore, the null hypotheses for these comparisons were retained. The information cited in Table 4 indicated no additional associations between the independent variables and the dependent variable.

It was hypothesized in composite null hypothesis number five that the differences among the mean Occupational Sex-Role Stereotyping scores of secondary school students according to family structure, classification of student, and size of school would not be statistically significant. Information pertaining to composite null hypothesis number five was presented in Table 5. The following were cited in Table 5: variables, group sizes, means, standard deviations, *F* values, and *p* levels.

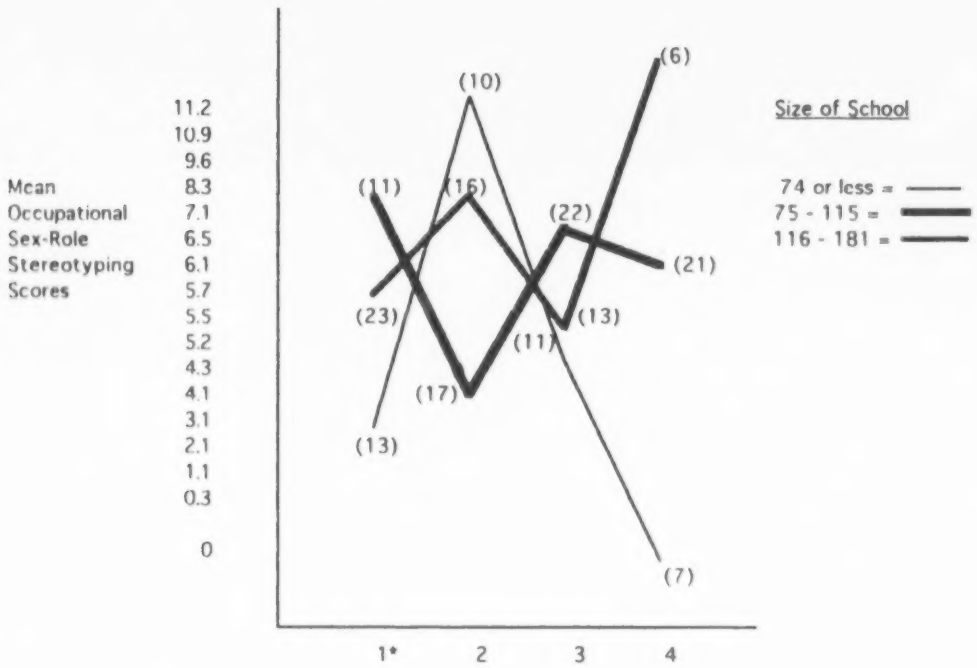
Table 5: A Comparison of Mean Occupational Sex-Role Stereotyping Scores of Secondary School Students According to Family Structure, Classification of Student, and Size of School Employing a Three-Way Analysis of Variance.

Variable	n	M*	s	F value	p level
Family Structure (E)					
Intact	96	6.2	8.07		
Reconstituted	25	4.4	7.51	0.63	.5987
One Parent	37	6.2	8.15		
Other	12	7.4	7.90		
Classification of Student (F)					
9th Grade	47	5.6	6.28		
10th Grade	43	6.9	9.83	0.86	.4649
11th Grade	46	6.9	7.79		
12th Grade	34	5.8	7.92		
Size of School (G)					
Level 1**	41	5.4	9.09		
Level 2	71	6.0	7.21	0.00	.9969
Level 3	58	6.6	8.10		
	Interactions				
	E x F			0.99	.4438
	E x G			0.98	.4412
	F x G			2.81	.0133
	E x F x G			1.42	.1719

*The larger the value, the greater the stereotyping (possible score 0-35). **Level 1 = Enrollment of 74 or less in the upper three grades during the 1993-94 school year, Level 2 = Enrollment of 75-115 in the upper three grades during the 1993-94 school year, Level 3 = Enrollment of 116-181 in the upper three grades during the 1993-94 school year.

One of the 7 p values was statistically significant at the .05 level; therefore, the null hypothesis for this comparison was rejected. The statistically significant comparison was for the interaction between the independent variables classification of student and size of school. The interaction between classification of student and size of school was depicted in a profile plot. Figure 2 contains mean occupational sex-role stereotyping scores and curves for size of school.

Figure 2: The Interaction Between the Independent Variables Classification of Students and Size of School for the Dependent Variable Occupational Sex-Role Stereotyping.



* 1 = 9th Grade, 2 = 10th Grade, 3 = 11th Grade, 4 = 12th Grade

The interaction between the independent variables size of school and classification of student was disordinal. The information cited in Figure 2 indicated the following:

1. twelfth grade students from schools sized 116 to 181 had numerically the highest mean occupational sex-role stereotyping scores of any sub-group, and
2. twelfth grade students from schools sized 74 or less had numerically the lowest mean sex-role stereotyping scores of any sub-group.

It was hypothesized in composite null hypothesis number six that the differences among the mean occupational Sex-Role Stereotyping scores of secondary school students according to gender, nationality of student, and socioeconomic status of the parents would not be statistically significant. Information pertaining to composite null hypothesis number six was presented in Table 6. The following were cited in Table 6: variables, sample size, means, standard deviations, F values, and p levels.

Table 6: A Comparison of Mean Occupational Sex-Role Stereotyping Scores of Secondary School Students According to Gender, Nationality of the Student, and Socioeconomic Status of the Parents Employing a Three-Way Analysis of Variance.

Variable	n	M*	s	F value	p level
Gender (A)					
female	90	4.8	7.10	1.54	.2167
male	80	7.5	8.65		
Nationality of (H) the Student					
White	122	5.7	7.90	0.03	.8744
Nonwhite	48	7.0	8.12		
Socioeconomic Status of (D) the Parents					
1**	109	5.6	7.91	0.11	.7353
2	61	6.9	8.06		
	Interactions				
	A x H			0.02	.8908
	A x D			2.46	.1187
	H x D			0.02	.8780
	A x H x D			0.85	.3583

*The larger the value, the greater the stereotyping (possible score 0-35). **1 = Paid full lunch rates, 2 = Did not pay full lunch rates.

None of the 7 p values were statistically significant at the .05 level; therefore, the null hypotheses for these comparisons were retained. The information cited in Table 6 indicated no additional associations between the independent variables and the dependent variable.

Discussion

Summary

The purpose of the researcher was to investigate occupational sex-role stereotyping in secondary students. The independent variables were: gender, classification of student, socioeconomic status of the parents, mother's employment outside the home, family structure, parental educational level, size of school, and nationality of the student. The dependent variable was scores from Occupational Sex-Role Stereotyping instrument. The sample consisted of 170 secondary students. This included 80 males and 90 females; of these 47 were 9th

grade students, 43 were 10th grade students, 46 were 11th grade students, and 34 were 12th grade students. Six composite null hypotheses were tested at the .05 level of significance employing three-way analysis of variance (general linear model).

A total of 24 comparisons were made plus 18 recurring. Of the 24 comparisons, 7 were main effect and 17 for interactions. Of the 7 main effects, 1 was statistically significant at the .05 level. The statistically significant main effect was for the independent variable gender. The results indicated males had a statistically higher mean occupational sex-role stereotyping score than females. Of the 17 interactions, 2 were statistically significant at the .05 level. The following interactions were statistically significant:

1. the independent variables mother's employment outside the home and socioeconomic status of the parents; and,
2. classification of the student and size of school.

The Related Literature and the Results of the Present Study

The results of the present study supported those reported by Bardwell, Cochran, and Walker (1986) that boys are more aware of sex roles than girls because of the rigid, culturally determined necessity for boys to avoid feminine activities. The results of the present study also supported those reported by Long (1994) which stated that males had higher mean sex-role stereotyping scores than females. The results of the present research partially supported those reported by Mannheim and Tally (1993), which indicated that with the increase in the number of mothers who are entering into the work force and the growing diversification of the types of jobs they are holding, they are more likely to transmit a more broad spectrum of work values to their children than is usually associated with feminine occupations. The results of the present study also partially supported research by Awender and Wearne (1990) who conducted a study to determine if there was a relationship between socioeconomic

status and occupation choice of children. Their research results indicated that sex-stereotype answers were given by the lowest socioeconomic group most often, followed by the highest socioeconomic group.

The results of the present study did not support the findings reported by Nelson and Keith (1990) that chronological age was inversely and significantly related to the level of traditionalism of both male and female attitudes; as the adolescents aged, they became less traditional. The results of the present study did not support those reported by Dunne (1980) which indicated that the majority of rural women still conform to the traditional norms concerning woman's proper place: in the home, with the children, and supportive of her spouse's endeavors.

Generalizations

The results of the present study appeared to support the following generalizations:

(1) male secondary school students have greater occupational

sex-role sterotyping than female students,

(2) the independent variables mother's employment outside the home and socioeconomic status of the parents should be examined concurrently with occupational sex-role stereotyping, and

(3) the independent variables size of school and classification of student should be examined concurrently with occupational sex-role stereotyping.

Recommendations

The results of the present study appeared to support the following recommendations:

(1) the study shoud be replicated using a larger random sample,

(2) the study should be replicated in a variety of geographical areas,

(3) the study should be replicated employing schools of different enrollments,

(4) the interactions between mother's employment outside the

home and socioeconomic status of the parents should be investigated futher,

(5) the interaction between size of school and classification of the student should be investigated futher, and

(6) use of a different instrument to determine sex-role stereotyping scores.

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Appendix A

Demographic Sheet

Demographic Sheet

Plese place a check next to the item which best describes you in each of the questions.

1. Gender: _____ Male _____ Female

2. Do you receive special lunch rates?

_____ free lunches _____ reduced lunches
_____ pay full lunch rates

3. Is your mother presently working outside the home, either full-time or part-time?

_____ yes _____ no

4. Parents education: Check highest level completed.

Mother		Father
_____	Less than high school.....	_____
_____	High school graduate.....	_____
_____	Some college or training beyond high school.....	_____
_____	College degree or beyond..	_____

5. Family structure:

_____ Intact (living with biological mother and father)
_____ Mother only _____ Father only
_____ Mother & step-father _____ Father & step-mother
_____ Grandparents _____ Foster parents

6. Classification

_____ Freshman _____ Sophomore
_____ Junior _____ Senior

7. Nationality

_____ White _____ Hispanic _____ Asian

_____ Native American _____ African American

Appendix B

Occupational Sex-Role Stereotyping

OCCUPATIONAL SEX-ROLE STEREOTYPING QUESTIONNAIRE

Occupations for men and women. Circle "FEMALE ONLY" if you think the occupation is for women. Circle "MALE ONLY" if you think the occupation is for men. Circle the word "BOTH" if you think the occupation is for both females and males.

1.	Zookeeper	FEMALE ONLY	MALE ONLY	BOTH
2.	Fashion designer	FEMALE ONLY	MALE ONLY	BOTH
3.	Astronaut	FEMALE ONLY	MALE ONLY	BOTH
4.	Chemical engineer	FEMALE ONLY	MALE ONLY	BOTH
5.	Singer	FEMALE ONLY	MALE ONLY	BOTH
6.	Professional athlete	FEMALE ONLY	MALE ONLY	BOTH
7.	News broadcaster	FEMALE ONLY	MALE ONLY	BOTH
8.	Baker	FEMALE ONLY	MALE ONLY	BOTH
9.	Business secretary	FEMALE ONLY	MALE ONLY	BOTH
10.	Librarian	FEMALE ONLY	MALE ONLY	BOTH
11.	Computer programmer	FEMALE ONLY	MALE ONLY	BOTH
12.	School teacher	FEMALE ONLY	MALE ONLY	BOTH
13.	Truck driver	FEMALE ONLY	MALE ONLY	BOTH
14.	Tennis Player	FEMALE ONLY	MALE ONLY	BOTH
15.	Firefighter	FEMALE ONLY	MALE ONLY	BOTH
16.	Model	FEMALE ONLY	MALE ONLY	BOTH
17.	Police officer	FEMALE ONLY	MALE ONLY	BOTH
18.	Veterinarian	FEMALE ONLY	MALE ONLY	BOTH
19.	Doctor	FEMALE ONLY	MALE ONLY	BOTH
20.	Mechanic	FEMALE ONLY	MALE ONLY	BOTH
21.	Farmer	FEMALE ONLY	MALE ONLY	BOTH
22.	Scientist	FEMALE ONLY	MALE ONLY	BOTH
23.	Carpenter	FEMALE ONLY	MALE ONLY	BOTH
24.	Store clerk	FEMALE ONLY	MALE ONLY	BOTH
25.	Mail carrier	FEMALE ONLY	MALE ONLY	BOTH
26.	Airplane pilot	FEMALE ONLY	MALE ONLY	BOTH
27.	Lawyer	FEMALE ONLY	MALE ONLY	BOTH
28.	Florist	FEMALE ONLY	MALE ONLY	BOTH
29.	Nurse	FEMALE ONLY	MALE ONLY	BOTH
30.	Heavy equipment operator	FEMALE ONLY	MALE ONLY	BOTH
31.	Medical technician	FEMALE ONLY	MALE ONLY	BOTH
32.	Bus driver	FEMALE ONLY	MALE ONLY	BOTH
33.	Custodian	FEMALE ONLY	MALE ONLY	BOTH
34.	School superintendent	FEMALE ONLY	MALE ONLY	BOTH
35.	Salesperson	FEMALE ONLY	MALE ONLY	BOTH

Appendix C

Instruction Sheet

Instruction Sheet

My name is . I am assisting a graduate student at Fort Hays State University to complete partial requirements for the Degree of Masters of Science. As I read the instructions, the student assistant will be placing a work package on your desk and we ask you not to turn it over until instructed to do so.

The purpose of the researcher is to investigate occupational sex-role stereotyping in secondary students. The Demographic Sheet and attached questionnaire is part of the research. Your cooperation in this study will help the researcher. Your responses are completely confidential and cannot be identified with you personally. If you have questions, you may ask for assistance. You have the right not to participate. If you choose not to participate, please remain seated quietly and your package will be picked up with the rest of the students. If you select to participate, you must answer all questions on both instruments in order for it to be used in the research.

You may now turn your package over. Please place a check next to the item which best describes you in each question of the Demographic Sheet. On the Occupational Sex-Role Stereotyping instrument, circle "Female Only" if you think the occupation is for females, circle "Male only" if you think it is for males and "Both" if you think the occupation is for both female and male. When all students have finished,the instruments will be collected and thank you for your participation.

Appendix D

Letters Requesting Permission

Box 175
Deerfield, KS 67838
(316) 426-6288
April 27, 1994

Mr. Dean Katt, Principal
Holcomb High School
Holcomb, KS 67851

Dear Mr. Katt:

My name is Toby Holmes. I am a graduate student at Fort Hays State University. I am writing a thesis as a partial requirement for a master of science degree in school counseling. In order to complete research for my thesis, I am requesting your assistance to obtain the needed data.

The topic of my thesis is occupational sex-role stereotyping of secondary school students. A questionnaire will be administered to three schools in southwest Kansas, each of differing enrollment. I am requesting that all students who wish to complete the questionnaire be allowed to participate.

I ask that no student place his or her name or make any stray mark on the questionnaire. This will assure anonymity and make scoring the instrument much easier. I assure you that the utmost care will be taken to attain maximum confidentiality. A copy of the completed thesis will be placed in Forsythe Library on the campus of Fort Hays State University.

The complete package will consist of a sheet of instructions, a demographic sheet, and the sex-role stereotyping questionnaire. The demographic sheet and questionnaire must be kept together. Please do not allow the students to separate them. The entire process will take approximately 15 minutes to complete.

I would like to attain your permission to administer this survey in your school. If you have any questions or concerns, please do not hesitate to contact me.

Thank your for your time and help in this matter.

Sincerely,

Toby Holmes

Box 175
Deerfield, KS 67838
(316) 426-6288
April 27, 1994

Mr. Larry Phillipi, Principal
Moscow High School
Moscow, KS 67952

Dear Mr. Phillipi:

My name is Toby Holmes. I am a graduate student at Fort Hays State University. I am writing a thesis as a partial requirement for a master of science degree in school counseling. In order to complete research for my thesis, I am requesting your assistance to obtain the needed data.

The topic of my thesis is occupational sex-role stereotyping of secondary school students. A questionnaire will be administered to three schools in southwest Kansas, each of differing enrollment. I am requesting that all students who wish to complete the questionnaire be allowed to participate.

I ask that no student place his or her name or make any stray mark on the questionnaire. This will assure anonymity and make scoring the instrument much easier. I assure you that the utmost care will be taken to attain maximum confidentiality. A copy of the completed thesis will be placed in Forsythe Library on the campus of Fort Hays State University.

The complete package will consist of a sheet of instructions, a demographic sheet, and the sex-role stereotyping questionnaire. The demographic sheet and questionnaire must be kept together. Please do not allow the students to separate them. The entire process will take approximately 15 minutes to complete.

I would like to attain your permission to administer this survey in your school. If you have any questions or concerns, please do not hesitate to contact me.

Thank your for your time and help in this matter.

Sincerely,

Toby Holmes

May 12, 1994

Maribeth Long
Box 744
Cimmarron, KS 67835

Regarding our telephone conversation of May 10, 1994, I am writing to you to obtain your permission to use your survey instrument that you developed. I, too, am writing my thesis on sex-role stereotyping of secondary school students and was informed that the instrument you used was very good.

Thank you for your time and consideration.

Sincerely,

Toby Holmes

Box 175
Deerfield KS 67838

Appendix E

Letters Granting Permission

Holcomb High School
USD #363
Holcomb, Kansas 67851
(316) 277-2063

April 29, 1994

Mr. Holmes:

You have my permission to survey our students. I have asked our counselor to assist in the administration of the survey.

Good luck in your research.

Sincerely,

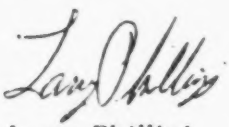
Dean Katt
Principal
Holcomb High School

April 30, 1994

Dear Mr. Holmes:

You have permission to administer the questionnaire you described in your letter. Feel free to contact us if we can be of futher assistance.

Sincerely,



Larry Phillipi

Unified School District No. 477

Staffed By Friendly People Who Teach The Person In The Pupil

P. O. Box 99
Ingalls, Kansas 67853-0099

May 14, 1994

Dear Toby,

You may use the demographic sheet and the sex-role inventory that you asked about. If there is anything else that I can do to help in your research, please feel free to call.

Good luck!

Maribeth

Maribeth Long